

SALIX STARKEANA IN NORTH AMERICA

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The name *Salix depressa* L. subsp. *rostrata* (Anderss.) Hiitonen (Mem. Soc. Faun. Fl. Fennica 25: 82, 1950) has been applied to *Salix bebbiana* Sarg. in North America by Hultén (1968). However, *Salix depressa* L. and *Salix bebbiana* Sarg. are not closely related taxa. The epithet *depressa* has been the cause of some confusion among salicologists because several authors have used the same epithet for different species.

Salix depressa L. (Fl. Suec. 2nd ed: 352, 1755) is a synonym of *Salix lanata* L. (Sp. Pl. 1019, 1753). *Salix depressa* (non L.) as used in part by Fries (1832, 1840); Ledebour (1850); and Seemen (1909); is a synonym of *Salix starkeana* Willd., the European and Asian willow species most closely related to *Salix bebbiana* Sarg. of North America.

The epithet *rostrata* is also confusing because it has been applied to several different willow species. Richardson in 1823 used the epithet *rostrata* for a willow species he described from specimens collected somewhere in Canada west of Hudson Bay. However, he did not know that Thuiller had already used the epithet *rostrata* for a different taxon described by him in 1799. Sargent proposed *Salix bebbiana* as a new name for *Salix rostrata* Richardson in 1895.

Thus, we see that the taxonomy of Hiitonen and Hultén places the taxon known as *Salix bebbiana* Sarg. as a subspecies of the taxon known as *Salix lanata* L. These two willows have completely different morphological characters and have been placed in different sections by most European salicologists including Skvortsov of the U.S.S.R. (1968).

I consider *Salix bebbiana* to be a subspecies of *Salix starkeana* and propose the following taxonomy:

1. ***Salix starkeana* Willd. subsp. *starkeana*.**

Salix starkeana Willd., Sp. Pl. 4(2): 677, 1806.

Salix livida Wahlenb., Fl. Lapp: 272, 1812.

Salix vagans Anderss., Öfver. K. Vet. Akad. Förhand 15: 121, 1858.

Salix depressa auct. (non L. 1755, Fl. Suec. 2 ed.: 332); Fries, 1832, Mantissa 1: 56, id. 1840, Bot. Not.: 197; Ledb., 1850, Fl. Ross. 3, 2: 611; Seemen, 1909, in Aschers. et Graebn. Synops. 4: 115.

TYPUS: Silesia, prope Gurau, leg. *Starke* (B, K, LE, S).

2. ***Salix starkeana*** Willd., subsp. ***bebbiana*** (Sarg.) Youngberg, comb. nov.

Salix rostrata Richardson, in Franklin, Journey: 753, 1823; not Thuill., 1799.

Salix fusca Hooker, Fl. Bor.-Am. 2: 151, 1839; non L.

Salix vagans 1. *cinerascens* b. *occidentalis* Andersson, in Öfv. Vet.-Akad. Förh. 15: 122, 1858.

Salix vagans 1. *S. rostrata* Andersson, in Svensk. Vet.-Akad. Handl. 6: 87, 1867.

Salix vagans occidentalis Andersson, in Svensk. Vet.-Akad. Handl. 6: 87, 1867.

Salix livida occidentalis Gray, Man. ed 5, 464, 1867.

Salix vagans rostrata 3. *obovata* Andersson apud De Candolle, Prodr. 16(2): 227, 1868.

Salix bebbiana Sarg., Gard. & Forest 8: 463, 1895.

Salix perrostrata Rydb., Bull. N.Y. Bot. Gard. 2: 163, 1901.

Salix depressa c. *rostrata* Seemen, in Ascherson & Graebner, Syn. Mitteleur. Fl. 4: 119, 1909.

Salix bebbiana var. *perrostrata* (Rydb) Schn., Jour. Arnold Arb. 2: 71, 1920.

TYPUS: Forest regions of Canada W. of Hudson Bay, *Richardson* (GH!, K, NY).

Salix bebbiana is very similar to *Salix starkeana*, but these two taxa may be distinguished by the following characters. The mature leaves and twigs of the current season usually have some hairs present in *Salix bebbiana* while

the mature leaves and twigs of the current season are glabrous in *Salix starkeana*. Subspecies *bebbiana* occurs in North America, and subspecies *starkeana* occurs in Finland, Czechoslovakia, Germany, Switzerland, Norway, Romania, Sweden, and the U.S.S.R.

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LITERATURE CITED

- HULTÉN, E. 1968. Flora of Alaska and neighboring territories; a manual of vascular plants. Stanford University Press.
- SKVORTSOV, A. K. 1968. Willows of the USSR and Adjacent Regions. Moscow.